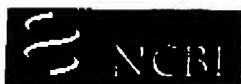


## Blast Result

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## Blast 2 Sequences results

PubMed

Entrez

BLAST

OMIM

Taxonomy

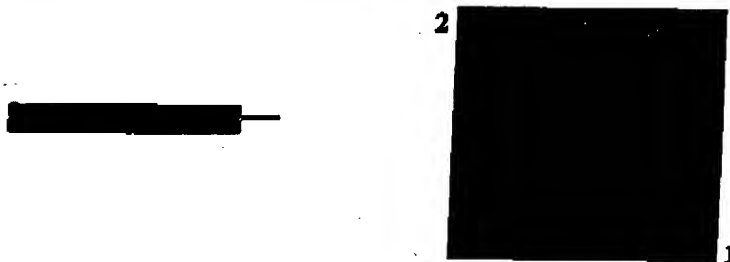
Structure

## BLAST 2 SEQUENCES RESULTS VERSION BLASTN 2.2.9 [May-01-2004]

Match: 1 Mismatch: 2 gap open: 5 gap extension: 2  
x\_dropoff: 50 expect: 10.000 wordsize: 11 Filter ☐

Sequence 1 lcl|seq\_1 Length 6169 (1 .. 6169)

Sequence 2 lcl|seq\_2 Length 5271 (1 .. 5271)



NOTE: The statistics (bitscore and expect value) is calculated based on the size of nr database

NOTE: If protein translation is reversed, please repeat the search with reverse strand of the query sequence

Score = 1.014e+04 bits (5271), Expect = 0.0  
Identities = 5271/5271 (100%)  
Strand = Plus / Plus

```
Query: 1   atctttgttcagtttaoctcagggctattatgaaatgaaatgagataaccaatgtgaaag 60
          |||
Sbjct: 1   atctttgttcagtttacctcagggctattatgaaatgaaatgagataaccaatgtgaaag 60

Query: 61   tcctataaactgtatagcctccattcggatgtatgtctttggcaggatgataaagaatca 120
          |||
Sbjct: 61   tcctataaactgtatagcctccattcggatgtatgtctttggcaggatgataaagaatca 120

Query: 121  ggaagaaggagtatccacgtagccaagtgtccaggctgtgtctgtcttatttttagtga 180
          |||
Sbjct: 121  ggaagaaggagtatccacgtagccaagtgtccaggctgtgtctgtcttatttttagtga 180

Query: 181  cagatgttgctcctgacagaagctattcttcaggaaacatcacatccaatatggtaaatac 240
          |||
Sbjct: 181  cagatgttgctcctgacagaagctattcttcaggaaacatcacatccaatatggtaaatac 240
```

## Blast Result

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Query: 241 catcaaacaggagctaagaaacaggaatgagatgggcacttgcccaaggaaaaatgccag 300  
|||||  
Sbjct: 241 catcaaacaggagctaagaaacaggaatgagatgggcacttgcccaaggaaaaatgccag 300

Query: 301 gagagcaaataatgatgaaaaataaacttttccctttgtttttaatttcaggaaaaaatg 360  
|||||  
Sbjct: 301 gagagcaaataatgatgaaaaataaacttttccctttgtttttaatttcaggaaaaaatg 360

Query: 361 atgaggaccaaatacaatgaataaggaaaaacagctcagaaaaagatgtttccaaattgg 420  
|||||  
Sbjct: 361 atgaggaccaaatacaatgaataaggaaaaacagctcagaaaaagatgtttccaaattgg 420

Query: 421 taattaagtatttgttccttgggaagagacctccatgtgagcttgatgggaaaaatgggaa 480  
|||||  
Sbjct: 421 taattaagtatttgttccttgggaagagacctccatgtgagcttgatgggaaaaatgggaa 480

Query: 481 aaacgtcaaaagcatgatctgatcagatcccaaagtggtattatttttaaaaaccagat 540  
|||||  
Sbjct: 481 aaacgtcaaaagcatgatctgatcagatcccaaagtggtattatttttaaaaaccagat 540

Query: 541 ggcatcactctggggaggcaagttcaggaaggtcatgttagcaaaggacataacaataac 600  
|||||  
Sbjct: 541 ggcatcactctggggaggcaagttcaggaaggtcatgttagcaaaggacataacaataac 600

Query: 601 agcaaaatcaaaattccgcaaatagcaggaggaaaaatggggactgggaaagctttcataac 660  
|||||  
Sbjct: 601 agcaaaatcaaaattccgcaaatagcaggaggaaaaatggggactgggaaagctttcataac 660

Query: 661 agtgattaggcagttgaccatgttcgcaacacctcccgctctataccagggaacacaaaa 720  
|||||  
Sbjct: 661 agtgattaggcagttgaccatgttcgcaacacctcccgctctataccagggaacacaaaa 720

Query: 721 attgactgggctaagcctggactttcaagggaatatgaaaaactgagagcaaaacaaaa 780  
|||||  
Sbjct: 721 attgactgggctaagcctggactttcaagggaatatgaaaaactgagagcaaaacaaaa 780

Query: 781 gacatgggttaaaaggcaaccagaacattgtgagccttcaaagcagcagtgcccotcagca 840  
|||||  
Sbjct: 781 gacatgggttaaaaggcaaccagaacattgtgagccttcaaagcagcagtgcccotcagca 840

Query: 841 gggaccctgaggcatttgccttttaggaaggccagttttcttaaggaatcttaagaaactc 900  
|||||  
Sbjct: 841 gggaccctgaggcatttgccttttaggaaggccagttttcttaaggaatcttaagaaactc 900

Query: 901 ttgaaagatcatgaattttaaccattttaagtataaaacaaatatgcgatgcataatcag 960  
|||||  
Sbjct: 901 ttgaaagatcatgaattttaaccattttaagtataaaacaaatatgcgatgcataatcag 960

## Blast Result

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Query: 961 tttagacatgggtcccaattttataaagtcaggcatacaaggataacgtgtcccagctcc 1020  
|||||  
Sbjct: 961 tttagacatgggtcccaattttataaagtcaggcatacaaggataacgtgtcccagctcc 1020

Query: 1021 ggataggtcagaaatcattagaaatcactgtgtccccatcctaactttttcagaatgatc 1080  
|||||  
Sbjct: 1021 ggataggtcagaaatcattagaaatcactgtgtccccatcctaactttttcagaatgatc 1080

Query: 1081 tgtcatagccctcacacacaggcccgatgtgtgtgacctacaaccacatctacaacccaa 1140  
|||||  
Sbjct: 1081 tgtcatagccctcacacacaggcccgatgtgtgtgacctacaaccacatctacaacccaa 1140

Query: 1141 gtgcctcaaccattgttaacgtgtcatctcagtaggtcccattacaaatgccacctcccc 1200  
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Sbjct: 1141 gtgcctcaaccattgttaacgtgtcatctcagtaggtcccattacaaatgccacctcccc 1200

Query: 1201 tgtgcagcccatcccgctccacaggaagtctcccaactctagacttctgcatcacgatgt 1260  
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Sbjct: 1201 tgtgcagcccatcccgctccacaggaagtctcccaactctagacttctgcatcacgatgt 1260

Query: 1261 tacagccagaagctccgtgaggggtgagggctgtgtgtttacacctacctgtatgctctac 1320  
|||||  
Sbjct: 1261 tacagccagaagctccgtgaggggtgagggctgtgtgtttacacctacctgtatgctctac 1320

Query: 1321 acctgagctcactgcaacctctgcctcccaggttcaagcaattctcctgtctcagcctcc 1380  
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Sbjct: 1321 acctgagctcactgcaacctctgcctcccaggttcaagcaattctcctgtctcagcctcc 1380

Query: 1381 cgggtagctgggactacaggcgacgcccggctaattttgtattgttagtagagatggg 1440  
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Sbjct: 1381 cgggtagctgggactacaggcgacgcccggctaattttgtattgttagtagagatggg 1440

Query: 1441 gtttcaccatattagcccggtggtcttgaactcctgacctcaggtgatccaccacctc 1500  
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Sbjct: 1441 gtttcaccatattagcccggtggtcttgaactcctgacctcaggtgatccaccacctc 1500

Query: 1501 agcctcctaaagtgtctgggattacaggcatgagtcacccgcccggccaagggtcagtg 1560  
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Sbjct: 1501 agcctcctaaagtgtctgggattacaggcatgagtcacccgcccggccaagggtcagtg 1560

Query: 1561 ttaataaggaataacttgaatggtttactaaaccaacagggaacagacaaaagctgtga 1620  
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Query: 1621 taatttcagggattcttgggatggggaatggtgccatgagctgcctgcctagtccagac 1680  
|||||  
Sbjct: 1621 taatttcagggattcttgggatggggaatggtgccatgagctgcctgcctagtccagac 1680

## Blast Result

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Query: 1681 cactggtoctcatcactttcttccctcatcctcattttcaggctaagttaccattttatt 1740  
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Sbjct: 1681 cactggtoctcatcactttcttccctcatcctcattttcaggctaagttaccattttatt 1740

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Sbjct: 1801 ttccatttggggccatctgtgtgtgtgtatagggaggagggcataccccagagactcct 1860

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Sbjct: 2281 cccccaagcccgagtcttccaagcctcctcctccatcagtcacagcgctgcagctggcct 2340

Query: 2341 gectcgcttcccgatgaatcgtoctggtgcatctgagctggagactccttggctccaggct 2400  
|||||  
Sbjct: 2341 gectcgcttcccgatgaatcgtoctggtgcatctgagctggagactccttggctccaggct 2400

## Blast Result

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Query: 2401 ccagaaaggaaatggagagggaaactagtctaacggagaatctggaggggacagtgtttc 2460  
|||||  
Sbjct: 2401 ccagaaaggaaatggagagggaaactagtctaacggagaatctggaggggacagtgtttc 2460

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Sbjct: 2521 tggggacgctggggctgagcgggtgctgaaaggcaggaaggtgaaaagggcaaggctgaa 2580

Query: 2581 gctgccagatgttoagtgttcttcacggggctgggagttttccgttgcttctgtgagc 2640  
|||||  
Sbjct: 2581 gctgccagatgttcagtgttcttcacggggctgggagttttccgttgcttctgtgagc 2640

Query: 2641 ctttttatcttttctctgcttgaggagaagaagtctatttcataagggatgcagtttc 2700  
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Sbjct: 2641 ctttttatcttttctctgcttgaggagaagaagtctatttcataagggatgcagtttc 2700

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Sbjct: 2881 tgcaagacggtcgaaaaccttggaatcaggagactcggttttctttctggttctgccatt 2940

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Sbjct: 2941 ggttggtgtgtgcgaccgtgggcaagtgtctctccttcctgggccatagtcttctctget 3000

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Sbjct: 3001 ataaagacccttgagctctcgtgttctgtgaacacttcctgtgattctctgtgagggg 3060

Query: 3061 ggatgttgagaggggaaggaggcagagctggagcagctgagccacaggggaggtggaggg 3120  
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Sbjct: 3061 ggatgttgagaggggaaggaggcagagctggagcagctgagccacaggggaggtggaggg 3120

## Blast Result

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Query: 3121 ggacaggaaggcaggcagaagctgggtgctccatcagtcctcactgatcacgtcagactc 3180  
|||||  
Sbjct: 3121 ggacaggaaggcaggcagaagctgggtgctccatcagtcctcactgatcacgtcagactc 3180

Query: 3181 caggaccgagagccacaatgcttcaggaaagctcaatgaacccaacagccacattttcct 3240  
|||||  
Sbjct: 3181 caggaccgagagccacaatgcttcaggaaagctcaatgaacccaacagccacattttcct 3240

Query: 3241 tccctaagcatagacaatggcatttgccaataacccaaaagaatgcagagactaactggt 3300  
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Sbjct: 3241 tccctaagcatagacaatggcatttgccaataacccaaaagaatgcagagactaactggt 3300

Query: 3301 ggtagcttttgctggcattcaaaaactgggccagagcaagtggaaaatgccagagattg 3360  
|||||  
Sbjct: 3301 ggtagcttttgctggcattcaaaaactgggccagagcaagtggaaaatgccagagattg 3360

Query: 3361 ttaaacttttcaccctgaccagcacccacgcagctcagcagtgactgctgacagcacgg 3420  
|||||  
Sbjct: 3361 ttaaacttttcaccctgaccagcacccacgcagctcagcagtgactgctgacagcacgg 3420

Query: 3421 agtgacctgcagcgcaggggaggagaagaaaaagagaggggatagtgatgagcaagaaag 3480  
|||||  
Sbjct: 3421 agtgacctgcagcgcaggggaggagaagaaaaagagaggggatagtgatgagcaagaaag 3480

Query: 3481 acagattcattcaagggcagtggggaattgaccacagggattatagtcacgtgatcctgg 3540  
|||||  
Sbjct: 3481 acagattcattcaagggcagtggggaattgaccacagggattatagtcacgtgatcctgg 3540

Query: 3541 gttctaggaggcagggctatattgtggggggaaaaaatcagttcaaggggaagtcgggaga 3600  
|||||  
Sbjct: 3541 gttctaggaggcagggctatattgtggggggaaaaaatcagttcaaggggaagtcgggaga 3600

Query: 3601 cctgattttotaataactatatttttcttttacaagctgagtaattctgagcaagtcacaag 3660  
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Query: 3661 gtagtaactgaggctgtaagattacttagtttctccttattaggaactctttttctctgt 3720  
|||||  
Sbjct: 3661 gtagtaactgaggctgtaagattacttagtttctccttattaggaactctttttctctgt 3720

Query: 3721 ggagttagcagcacaaagggcaatcccgtttcttttaacaggaagaaaacattcctaagag 3780  
|||||  
Sbjct: 3721 ggagttagcagcacaaagggcaatcccgtttcttttaacaggaagaaaacattcctaagag 3780

Query: 3781 taaagccaaacagattcaagcctaggtcttgctgactatatgattgggtttttgaaaaat 3840  
|||||  
Sbjct: 3781 taaagccaaacagattcaagcctaggtcttgctgactatatgattgggtttttgaaaaat 3840

## Blast Result

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Query: 3841 catttcagcgatgtttactatctgattcagaaaatgagactagtaccottttggtcagctg 3900  
|||||  
Sbjct: 3841 catttcagcgatgtttactatctgattoagaaaatgagactagtaccottttggtcagctg 3900

Query: 3901 taaacaaacacccagttgtaaatgtctcaagttcaggcttaactgcagaaccaatcaaaa 3960  
|||||  
Sbjct: 3901 taaacaaacacccagttgtaaatgtctcaagttcaggcttaactgcagaaccaatcaaaa 3960

Query: 3961 agaatagaatcttttagagcaaactgtgtttctccacatctggaggtgagctctgccagggc 4020  
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Sbjct: 3961 agaatagaatcttttagagcaaactgtgtttctccacatctggaggtgagctctgccagggc 4020

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Query: 4141 ttattggctatttgccatttgcttttgtttttctctctgggtttattaatgtaaagcag 4200  
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Sbjct: 4141 ttattggctatttgccatttgcttttgtttttctctctgggtttattaatgtaaagcag 4200

Query: 4201 ggattattaacctacagtcagaaagcctgtgaatttgaatgaggaaaaaattacatttt 4260  
|||||  
Sbjct: 4201 ggattattaacctacagtcagaaagcctgtgaatttgaatgaggaaaaaattacatttt 4260

Query: 4261 tgtttttaccaccttctaactaaatttaacattttattccattgccaatagagccataaa 4320  
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Sbjct: 4261 tgtttttaccaccttctaactaaatttaacattttattccattgccaatagagccataaa 4320

Query: 4321 ctcaaagtggttaataacagttacgtgtgattttgtcattaccaatagaaatcacagacatt 4380  
|||||  
Sbjct: 4321 ctcaaagtggttaataacagttacgtgtgattttgtcattaccaatagaaatcacagacatt 4380

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Sbjct: 4381 ttatactatattacagttgttgcagatacgttgtgaagtgaatattttatactcaaaacta 4440

Query: 4441 ctttgaaattagacctcctgctggatcttgtttttaacatattaataaaaacatgtttaaa 4500  
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Sbjct: 4441 ctttgaaattagacctcctgctggatcttgtttttaacatattaataaaaacatgtttaaa 4500

Query: 4501 attttgatattttgataatcatatttcattatcatttgtttcctttgtaatctatatattt 4560  
|||||  
Sbjct: 4501 attttgatattttgataatcatatttcattatcatttgtttcctttgtaatctatatattt 4560

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```
CPU time:      0.05 user secs.      0.00 sys. secs      0.05 total secs.
```



## Blast Result

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Lambda	K	H
1.33	0.621	1.12

Gapped Lambda	K	H
1.33	0.621	1.12

Matrix: blastn matrix:1 -2  
Gap Penalties: Existence: 5, Extension: 2  
Number of Sequences: 1  
Number of Hits to DB: 1926  
Number of extensions: 71  
Number of successful extensions: 18  
Number of sequences better than 10.0: 1  
Number of HSP's better than 10.0 without gapping: 1  
Number of HSP's gapped: 2  
Number of HSP's successfully gapped: 1  
Number of extra gapped extensions for HSPs above 10.0: 0  
Length of query: 6169  
Length of database: 11,738,793,097  
Length adjustment: 27  
Effective length of query: 6142  
Effective length of database: 11,738,793,070  
Effective search space: 72099667035940  
Effective search space used: 72099667035940  
Neighboring words threshold: 0  
Window for multiple hits: 0  
X1: 11 (21.1 bits)  
X2: 26 (50.0 bits)  
X3: 26 (50.0 bits)  
S1: 12 (25.0 bits)  
S2: 22 (43.0 bits)